



20A SCHOTTKY BARREIER RECTIFIER

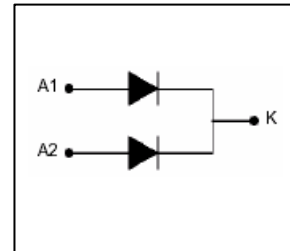
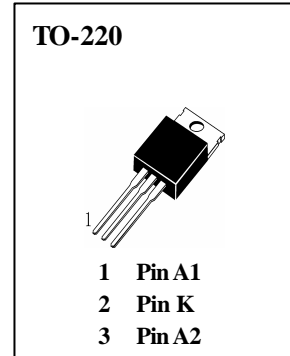
Features

- 20 Amps Total (10 Amps Per Diode Leg)
- Guard Ring Die Construction for Transient Protection
- Low Power Loss,High Efficiency
- High Surge Capability
- High Current Capability and Low Forward Voltage Drop
- For Use in Low Voltage,High Frequency Inverters,Free Wheelings ,and Polarity Protection Applications

Maximum Ratings

- T_{stg} —Storage Temperature..... -55~175
- T_j —Operating Temperature..... -55~150
- V_{RRM} —Peak Repetitive Reverse Voltage.....60V
- V_{RWM} — Working Peak Reverse Voltage..... 60V
- V_R —DC Blocking Voltage.....60V
- $V_{R(RMS)}$ —RMS Reverse Voltage.....42V
- $I_{F(AV)}$ —Average Recified Output Current@ $T_c=125$ Double Dies 20A
 (Note 1)Single Die 10A
- I_{FSM} —Non-Repetitive Peak Forward Surge Current(60Hz).....150A

Package



Electrical Characteristics @ $T_a=25$ unless otherwise specified

Single phase,half wave,60Hz,resistive or inductive load.

For capacitive load,derate current by 20%.

Characteristic	Symbol	Min	Max	Unit	Condition
Forward Voltage Drop(Note 1)	V_{FM}		0.85 0.75 0.95 0.85	V	$I_F=10A, T_C=25$ $I_F=10A, T_C=125$ $I_F=20A, T_C=25$ $I_F=20A, T_C=125$
Peak Reverse Current at Rated DC Blocking Voltage	I_{RM}		0.1 15	mA	$V_R = V_{RRM} \quad T_C=25$ $T_C=125$
Typical Junction Capacitance(Note 2)	C_j		650	pF	
Typical Thermal Resistance Junction to Case(Note 3)	R_{th-j}		2.0	/W	

Notes: 1. Pulse Test: Pulse Width = 300 ms, Duty Cycle 2.0%.

2. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0V DC.

3. Thermal resistance junction to case mounted on heatsink..



PERFORMANCE CURVES

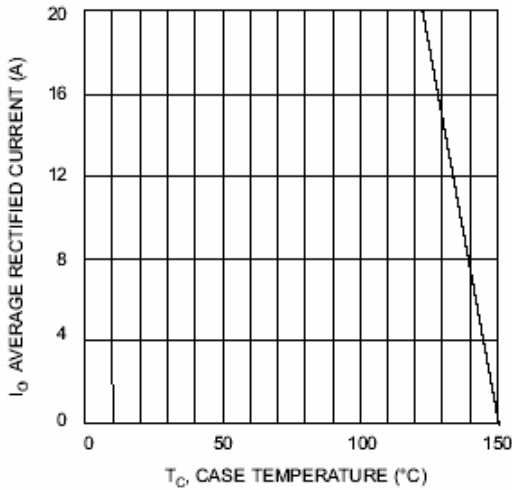


Fig. 1 Forward Current Derating Curve

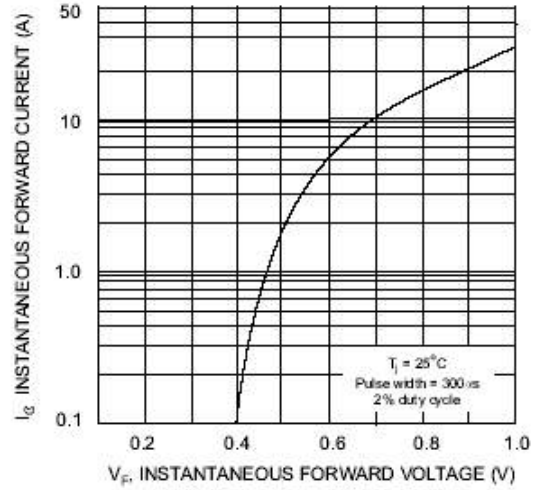


Fig. 2 Typical Forward Characteristics

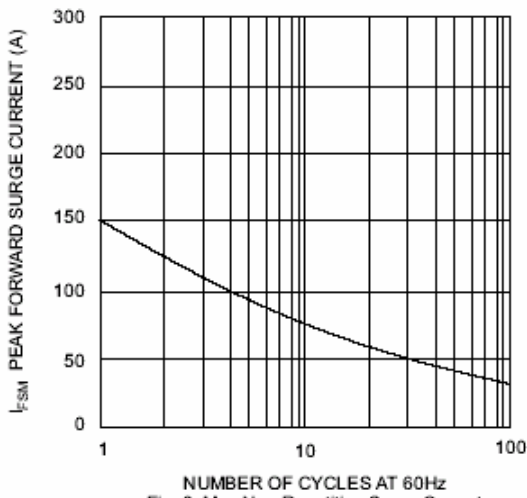


Fig. 3 Max Non-Repetitive Surge Current

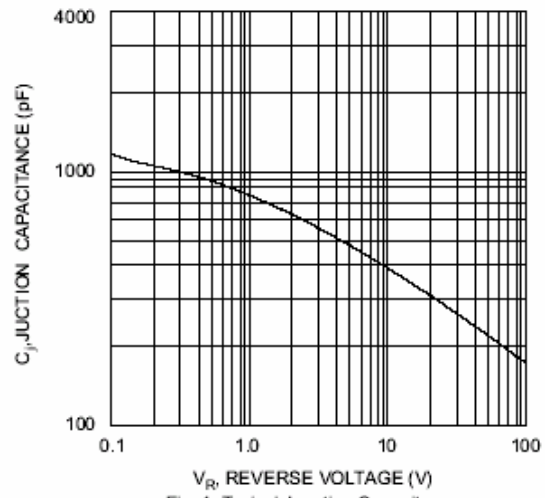


Fig. 4 Typical Junction Capacitance

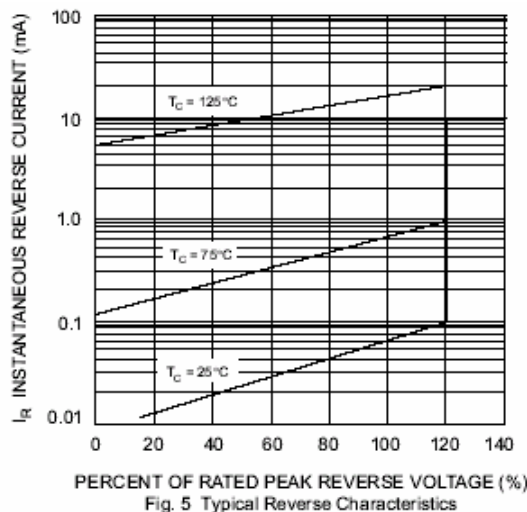


Fig. 5 Typical Reverse Characteristics